

Abstract

Methods for predicting a remaining lifetime of an electric energy storage mechanism, in particular a battery in a motor vehicle and devices for implementing such methods are described in which the remaining lifetime is determined by extrapolation with the help of a mathematical model of the energy storage mechanism. This remaining lifetime is defined as the time until reaching any definable limiting values for the minimum efficiency or minimum storage capacity. The remaining lifetime is indicated and, when the level falls below a preselectable threshold, a warning is displayed. The parameters of the energy storage mechanism are adapted continuously to the real values over the lifetime. The anticipated remaining lifetime is determined by extrapolation from the values for the efficiency and/or storage capacity, based on a specifiable charge state and temperature and the minimum values required for the particular application, these values being calculated at regular intervals on the basis of the model and saved.